

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Myong-Su Choe

Serial No.: To be assigned

Examiner: *To Be Assigned*

Filed: 20 December 2001

Art Unit: *To Be Assigned*For: APPARATUS AND METHOD FOR PERFORMING HIGH-SPEED IP ROUTE
LOOKUP AND MANAGING ROUTING/FORWARDING TABLESJ1073 U.S. PTO
10/022210
12/20/01**INFORMATION DISCLOSURE STATEMENT**Assistant Commissioner
for Patents
Washington, D.C. 20231

Sir:

In accordance with 37 C.F.R. §§ 1.56, and 1.97 and 1.98 applicant cites, provides copies and briefly discusses the following references newly cited by the U.S. Patent Offices.

U.S. PATENT REFERENCES:

<u>Publication No.</u>	<u>Inventor</u>	<u>Publication Date</u>
• US5,796,966	Simcoe et al.	Aug. 18, 1998
• US5,781,772	Wilkinson, III et al.	Jul. 14, 1998
• US6,067,574	Tzeng	May 23, 2000
• US6,061,712	Tzeng	May 9, 2000
• US6,018,524	Turner et al.	Jan. 25, 2000
• US6,011,795	Varghese et al.	Jan. 4, 2000

- US6,014,659 Wilkinson, III et al. Jan. 11, 2000

OTHER DOCUMENTS: Literature References

1. Keshav, S. and Sharma, R., Issues and Trends in Router Design, IEEE Communications Magazine, pages 144-151, May, 1998.

2. Kumar, V. and Lakshman, T. and Stiliadis, D., Beyond Best Effort: Router Architectures for the Differentiated Services of Tomorrow's Internet, IEEE Communications Magazine, pages 152-164, May, 1998.

3. Chan, H., Alnuweiri, H. and Leung, V., A Framework for Optimizing the Cost and Performance of Next-Generation IP Routers, IEEE Journal of Selected Areas in Communications, Vol. 17, No.6, pages 1013-1029, June 1999.

4. Partridge, C. et al., A 50-Gb/s IP Router, IEEE/ACM Trans. on Networking, vol. 6, no.3, pages 237-248, 1998.

5. Metz, C., IP Routers: New Tool for Gigabit Networking, IEEE Internet Computing, pages 14-18, Nov.-Dec., 1998.

6. Asthana, A., Delph, C., Jagadish, H., and Krzyzanowski, P., "Towards a gigabit IP router", J. High Speed Network, vol. 1, no.4, pages 281-288, 1992.

7. RFC 1518, An Architecture for IP Address Allocation with CIDR, Sept. 1993
8. RFC 1517, Applicability Statement for the Implementation of Classless Inter-Domain Routing (CIDR), Sept. 1993
9. Doeringer, W., Karjoth, G. and Nassehi, M., Routing on Longest-Matching Prefixes, IEEE/ACM Trans. on Networking, vol.4, no.1, pages 86-97, Feb., 1996.
10. Degermark, M., Brodnik, A., Carlsson, S. and Pink, S., Small Forwarding Tables for Fast Routing Lookups, In Proceedings of ACM SIGCOMM '97, pages 3-14, Cannes, France, 1997.
11. Srinivasan, V. and Varghese, G., Faster IP Lookups using Controlled Prefix Expansion, In Proceedings of ACM Sigmetrics '98 Conf., pages 1-11, 1998.
12. Lampson, B., Srinivasan, V. and Varghese, G., IP Lookups using Multiway and Multicolumn Search, In IEEE Infocom, pages 1248-1256, 1998.
13. Tzeng, H. and Przygienda, T., On Fast Address-Lookup Algorithms, IEEE Journal on Selected Areas in Communications, Vol. 17, No. 6, pages 1067-1082, June, 1999.
14. Waldvogel, M., Varghese, G., Turner, J. and Plattner, B., Scalable High Speed IP Routing

Lookups, In Proceedings of ACM SIGCOMM '97, Cannes, France, pages 25-37, 1997.

15. Waldvogel, M., Varghese, G., Turner, J. and Plattner, B., Scalable Best Matching Prefix Lookups, In Proceedings of PODC '98, Puerto Vallarta, page, 1998.

16. Kijkanjanarat, T. and Chao, H., Fast IP Lookups Using a Two-trie Data Structure, In Proceedings of Globecom'99, Global Communication Conference, 1999, vol. 2, pp. 1570-1575.

17. Nillson, S. and Karlsson, G., IP-Addresses Lookup Using LC-Tries, IEEE Journal on Selected Areas in Communications, Vol.17, No. 16, pages 1083-1092, 1999.

18. Crescenzi, P., Dardini, L. and Grossi, R., "IP Address Lookup Made Fast and Simple", Technical Report TR-99-01, Dipartimento di Informatica, University of Pisa, 1999.

19. Gupta, P., Lin, S. and McKeown, N., Routing Lookups in Hardware at Memory Access Speeds, In Proceedings of IEEE INFOCOM '98 Conf., pages 1240-1247, 1998.

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for Multigigabit Switching Routers, IEEE Journal on Selected Areas in Communications, Vol. 17, No. 6, pages 1093-1104, June, 1999.

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As for literatures 16, 24, and 25 in the list above, we will file them as soon as we obtain.

U.S. Patent No. US5,796,966 to Simcoe et al. entitled *Method and Apparatus for Dynamically Controlling Data Routes Through a Network*.

U.S. Patent No. US 5,781,772 to Wilkinson, III et al. entitled *Compressed Prefix Matching Database Searching*.

U.S. Patent No. US 6,067,574 to Tzeng entitled *High Speed Routing Using Compressed Tree Process*.

U.S. Patent No. US 6,061,712 to Tzeng entitled *Method For IP Routing Table Look-Up*.

U.S. Patent No. US 6,018,524 to Turner et al. entitled *Scalable High Speed IP Routing Lookups*.

U.S. Patent No. US 6,011,795 to Varghese et al. entitled *Method And Apparatus For Fast Hierarchical Address Lookup Using Controlled Expansion of Prefixes*.


U.S. Patent No. US 6,014,659 to Wilkinson, III et al. entitled *Compressed Prefix Matching Database Searching*.

Pursuant to 37 C.F.R. § 1.97 (e), each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement.

This citation of foregoing references is not intended to constitute an assertion that

Application has undertaken the search of the prior art. Accordingly, the Examiner is requested to take a wide-ranging and through search of the relevant of art.

Respectfully submitted,


Robert E. Bushnell
Reg. No.: 27,774

1522 "K" Street, N.W., Suite 300
Washington, D.C. 20005
Area Code: 202-408-9040

Folio: P56293
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INFORMATION DISCLOSURE STATEMENT PTO-1449	SERIAL NUMBER <i>To be assigned</i>	DOCKET NO. P56293
	APPLICANT MYONG-SU CHOE	
	FILING DATE 20 December 2001	GROUP <i>To be assigned</i>

J1973 U.S. PTO
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 12/20/01

U.S. PATENT DOCUMENTS							
EXAMINE	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE	
	5,796,966	08/18/98	Simcoe et al.				
	5,781,772	07/14/98	Wilkinson, III et al.				
	6,067,574	05/23/00	Tzeng				
	6,061,712	05/09/00	Tzeng				
	6,018,524	01/25/00	Turner et al.				
	6,011,795	01/04/00	Varghese et al.				
	6,014,659	01/11/00	Wilkinson, III et al.				
FOREIGN PATENT DOCUMENTS						TRANSLATION	
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
1	Keshav, S. and Sharma, R., Issues and Trends in Router Design, IEEE Communications Magazine, pages 144-151, May, 1998.						
2	Kumar, V. and Lakshman, T. and Stiliadis, D., Beyond Best Effort: Router Architectures for the Differentiated Services of Tomorrow's Internet, IEEE Communications Magazine, pages 152-164, May, 1998.						
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25	Cormen, T., Leiserson, C. and Rivest, R., Introduction to Algorithms, McGraw-Hill, New York, June 1990.
EXAMINER: _____ DATE CONSIDERED: _____	
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	